## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

Claims 1-18 (Cancelled).

19. (New) A method of operating a router in a communication network, said router having a plurality of interfaces to at least one connection-oriented non-broadcast multiple access network, said method comprising the steps of:

assigning a number to each of the interfaces;

grouping the interfaces into connectivity classes;

encoding information identifying the interfaces and the connectivity classes into a link state packet; and

transmitting the link state packet to other routers in the communication network.

- 20. (New) The method of claim 19 wherein the link state packet is an OSPF link state advertisement.
- 21. (New) The method of claim 19 wherein the information identifying the interfaces and the connectivity classes is encoded into opaque fields of the link state packet.
- 22. (New) The method of claim 19 wherein the non-broadcast multiple access network is an ATM network.